

The DAWN Report

January 27, 2011

Emergency Department Visits Involving Patients Seeking Detoxification or Substance Abuse Treatment Services

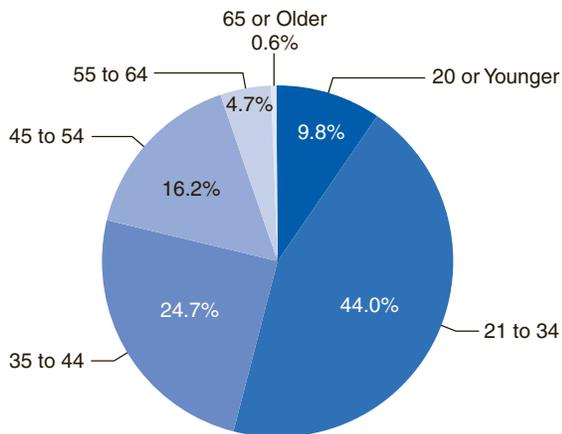
In Brief

- During 2008, an estimated 177,879 drug-related emergency department (ED) visits were made by patients seeking either detoxification or substance abuse treatment services
- Most of these ED visits were made by males (62.9 percent), and more than 2 in 5 visits (44.0 percent) were made by adults aged 21 to 34
- Compared with females in the same age group, males aged 21 or older seeking treatment services were more likely to make ED visits related to the use of alcohol in combination with other drugs (44.5 vs. 27.3 percent) and to illicit drug use (75.2 vs. 63.3 percent)
- Pharmaceuticals were involved in about two thirds of ED visits among persons aged 20 or younger (66.5 percent) and persons aged 65 or older (67.5 percent)

For those who receive substance abuse treatment, the hospital emergency department (ED) may serve as an initial entry point.¹ For example, some substance abuse treatment programs require prospective clients to obtain medical clearances prior to treatment admission, and the ED may be one of the few places where patients can receive such services if their needs are immediate.

Data from the Drug Abuse Warning Network (DAWN) can be used to examine ED visits involving persons seeking detoxification or substance abuse treatment services. Although ED visits do not encompass the full extent of the demand for these services, the DAWN data shed light on a treatment-seeking population that might otherwise be overlooked. Specifically, DAWN is a public health surveillance system that monitors drug-related ED visits in the United States.² To be a DAWN case, the ED visit must have involved a drug, either as the direct cause of the visit or as a contributing factor. This issue of *The DAWN Report* focuses on ED visits by patients seeking detoxification or other substance abuse treatment services (hereafter referred to as “seeking treatment services”) and highlights demographic differences among the patients and the types of drugs involved with these visits.

Figure 1. Percentage of Emergency Department (ED) Visits Involving Patients Seeking Treatment Services, by Age Group: 2008



Source: 2008 SAMHSA Drug Abuse Warning Network (DAWN).

Table 1. Types of Substances Involved in Emergency Department (ED) Visits among Patients Aged 20 or Younger Seeking Treatment Services: Percentages, 2008

Demographic	Alcohol*	Illicit Drugs	Pharmaceuticals**
Aged 20 or Younger	21.9	61.2	66.5
Male	21.8	54.7	60.0
Female	22.0	69.5	74.7

* The alcohol category includes visits involving alcohol in combination with other drugs for patients in all age groups and visits involving alcohol only for patients aged 20 or younger. DAWN does not track alcohol only visits for patients aged 21 or older.

** The pharmaceuticals category includes prescription medications, over-the-counter drugs, and dietary agents.

Source: 2008 SAMHSA Drug Abuse Warning Network (DAWN).

Overview

Of the 4.4 million drug-related emergency department (ED) visits made in 2008, an estimated 177,879 visits were made by patients seeking treatment services. Most of these ED visits were made by males (62.9 percent). The majority of the visits were made by younger to middle-aged adults aged 21 to 44 (Figure 1). Specifically, more than 2 in 5 visits (44.0 percent) were made by adults aged 21 to 34, and 24.7 percent of visits were made by adults aged 35 to 44.

Drugs Involved in ED Visits

Almost three quarters (73.0 percent) of drug-related ED visits made by patients seeking treatment services involved multiple drugs, with an overall average of 2.3 drugs (including alcohol) per ED visit.³ Although alcohol was implicated in more than one third (36.6 percent, or 65,166 visits) of these visits, the actual estimate for the total number of alcohol-related visits is likely higher because DAWN does not track alcohol only visits for patients aged 21 or older

(hereafter “adult patients”). Illicit drugs were involved in more than two thirds (69.9 percent) of visits, whereas pharmaceuticals were involved in 53.4 percent of these visits.

Alcohol and Drug Involvement among Patients Aged 20 or Younger

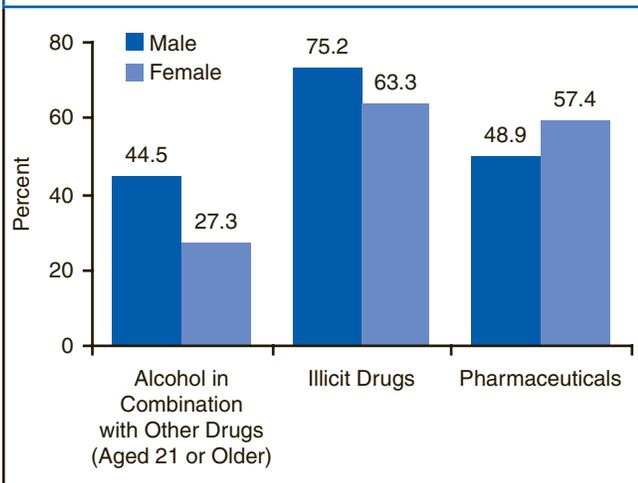
Among drug-related ED visits made by patients aged 20 or younger seeking treatment services, slightly more than 1 in 5 (21.9 percent) involved alcohol only or alcohol in combination with illicit drugs (Table 1).⁴ Illicit drug involvement among these patients was implicated in more than 6 in 10 visits (61.2 percent). The illicit drugs most commonly involved with these visits were marijuana (32.1 percent), heroin (26.4 percent), and cocaine (16.8 percent). About two thirds of ED visits made by patients in this age group involved pharmaceuticals (66.5 percent). Specifically, drugs that act on the central nervous system (CNS) (e.g., pain relievers, sedatives, and muscle relaxants) were involved in 64.0 percent of visits.

More than 1 in 5 visits made by male (21.8 percent) and female (22.0 percent) patients aged 20 or younger involved alcohol. However, visits made by females were more likely to involve pharmaceuticals than visits made by males (74.7 vs. 60.0 percent).

Drug Involvement among Adults by Gender

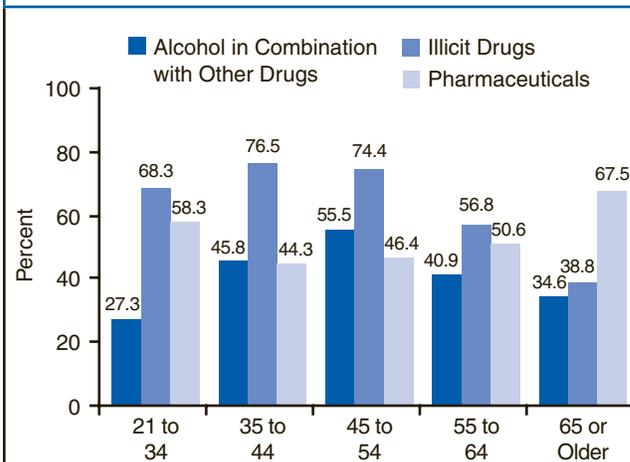
Compared with females in the same age group, males aged 21 or older seeking treatment services were more likely to make ED visits related to the use of alcohol in combination with other drugs (44.5 vs. 27.3 percent) and to illicit drug use (75.2 vs. 63.3 percent) (Figure 2). Of this latter type of involvement, the most commonly identified illicit drugs used by both males and females were cocaine (42.0 and 33.1 percent, respectively) and heroin (31.7 and 24.9 percent, respectively). ED visits made by adult females were more likely than visits made by adult males to involve pharmaceuticals (57.4 vs. 48.9 percent).

Figure 2. Types of Substances Involved in Emergency Department (ED) Visits among Adult Patients Seeking Treatment Services, by Gender: 2008



Source: 2008 SAMHSA Drug Abuse Warning Network (DAWN).

Figure 3. Types of Substances Involved in Emergency Department (ED) Visits among Adult Patients Seeking Treatment Services, by Age Group: 2008



Source: 2008 SAMHSA Drug Abuse Warning Network (DAWN).

Drug Involvement by Adults

The drugs implicated in ED visits involving patients seeking treatment services varied by adult age groups (Figure 3). Specifically, ED visits made by adults aged 21 to 34 and those aged 65 or older had the highest percentages of pharmaceutical involvement (58.3 and 67.5 percent, respectively). Nearly 6 in 10 drug-related ED visits made by patients aged 21 to 34 involved pharmaceuticals (58.3 percent) and almost 7 in 10 involved illicit drugs (68.3 percent). In the 35 to 44 age group, more than three quarters (76.5 percent) of such visits involved an illicit drug, representing the highest percentage of illicit drug involvement across all age groups. Further, more than 2 in 5 drug-related ED visits in this age group involved alcohol (45.8 percent) or pharmaceuticals (44.3 percent). Patients aged 35 to 44 and those aged 45 to 54 had similar percentages of illicit drugs (76.5 and 74.4 percent, respectively) and pharmaceuticals (44.3 and 46.4 percent, respectively) involved in their visits (Figure 3).

Among older adult patients, more than half (56.8 percent) of visits made by patients aged 55 to 64 and more than one third (38.8 percent) of visits made by patients aged 65 or older involved illicit drugs. These two age groups reported similar rates of alcohol involvement (40.9 percent for the 55 to 64 age group and 34.6 percent for the 65 or older age group). However, patients aged 65 or older had higher levels of pharmaceutical involvement compared with those aged 54 to 64 (67.5 vs. 50.6 percent, respectively).

Discussion

EDs represent a unique access point for directing substance abusers to appropriate treatment programs. In addition to serving as a venue for patients to gain medical clearance prior to entering treatment, EDs also provide a setting to screen and assess patients for substance abuse problems. Moreover, the ED may be an appropriate and convenient setting for brief interventions in which substance use is sufficiently problematic and for referrals to substance abuse treatment. In particular, differences by gender

and age may point toward the value in targeting males aged 25 to 44 for alcohol and drug screenings—as well as treatment referrals—within the ED setting.

End Notes

- ¹ Krupski, A., Sears, J. M., Joesch, J. M., Estee, S., He, L., Dunn, C., Huber, A., Roy-Byrne, P., & Ries, R. (2010, July 1). Impact of brief interventions and brief treatment on admissions to chemical dependency treatment. *Drug and Alcohol Dependence*, 110(1-2), 126-136.
- ² Data are collected from a nationally representative sample of short-term, general, non-Federal hospitals across the Nation. Specialty hospitals, including children's hospitals, are not included in the DAWN sample.
- ³ Drugs reported on include illicit drugs, alcohol, prescription drugs, over-the-counter medications, and dietary and herbal supplements.
- ⁴ The alcohol category in DAWN includes ED visits involving alcohol in combination with other drugs for patients in all age groups and visits involving alcohol only for patients aged 20 or younger. DAWN does not track alcohol only visits for patients aged 21 or older.

Suggested Citation

Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (January 27, 2011). *The DAWN Report: Emergency Department Visits Involving Patients Seeking Detoxification or Substance Abuse Treatment Services*. Rockville, MD.

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Findings from SAMHSA's 2008 Drug Abuse Warning Network (DAWN)

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The Drug Abuse Warning Network (DAWN) is a public health surveillance system that monitors drug-related morbidity and mortality. DAWN uses a probability sample of hospitals to produce estimates of drug-related emergency department (ED) visits for the United States and selected metropolitan areas annually. DAWN also produces annual profiles of drug-related deaths reviewed by medical examiners or coroners in selected metropolitan areas and States.

Any ED visit related to recent drug use is included in DAWN. All types of drugs—licit and illicit—are covered. Alcohol involvement is documented for patients of all ages if it occurs with another drug. Alcohol is considered an illicit drug for minors and is documented even if no other drug is involved. The classification of drugs used in DAWN is derived from the Multum *Lexicon*, copyright 2009, Multum Information Services, Inc. The Multum Licensing Agreement governing use of the *Lexicon* can be found at http://dawninfo.samhsa.gov/drug_vocab.

DAWN is one of three major surveys conducted by the Substance Abuse and Mental Health Services Administration's Center for Behavioral Health Statistics and Quality (SAMHSA/CBHSQ). For more information on other CBHSQ surveys, go to <http://oas.samhsa.gov>. SAMHSA has contracts with Westat (Rockville, MD) and RTI International (Research Triangle Park, NC) to operate the DAWN system and produce publications.

For publications and additional information about DAWN, go to <http://DAWNinfo.samhsa.gov/>.



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